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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,322

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Takashi Inoue

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06/16/2009

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EXAMINER

O HERN, BRENT T

ART UNIT

PAPER NUMBER

1794

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,322	Applicant(s) INOUE ET AL.	
	Examiner Brent T. O'Hern	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 7-35 is/are pending in the application.
- 4a) Of the above claim(s) 24-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,7-23 and 30-35 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1, 4 and 7-35 are pending with claims 24-29 withdrawn.

WITHDRAWN REJECTIONS

2. All rejections of record in the Office Action mailed 1/30/2009 have been withdrawn due to Applicant's amendments in the Paper filed 4/28/2009.

NEW OBJECTIONS

Claim Objections

3. Claims 19-20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations per claims 19-20 are included in amended claim 1.

NEW REJECTIONS

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1, 4, 7-12, 17-22 and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahlmann et al. (US 3,421,901) in view of Okada et al. (JP 2003144050).

Mahlmann ('901) teaches a method of extracting volatile components by which volatile components are obtained by steam extraction within a sealed container (See

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Col. 2, ll. 21-34, col. 6, ll. 6-46, with a sealed extraction/distillation process.) and roasting of tasty materials/ (roasted coffee beans), the method comprising directing steam into contact with the tasty material; and cooling, freeze-drying and recovering the steam after said directing steam into contact, wherein the steam extraction is carried out using super heated steam at normal pressure (*See Abstract, col. 2, ll. 21-34, col. 6, ll. 6-46 and claim 2 where the steam is above 180 °F or from above 180 to 230 °F (110 °C). Since the temperature is above the boiling point of water it is considered super heated.*), however, fails to expressly disclose wherein the super heated steam for extraction/roasting is set to a temperature higher than 140 °C but no higher than 500 °C per claims 1 and 11, wherein a steam flow rate of 0.3 to 30 kg/hr is used per 1 kg of tasty material per claims 1 and 19 or 1 to 30 kg/hr per kg of raw coffee beans per claim 12, wherein said directing step is carried out for 5 to 60 minutes per claims 1 and 20, and wherein a recovery rate of the volatile components by the steam extraction is 0.01 to 10% by weight as a solid with respect to the tasty material per claim 1, and the coffee beans being at least one type selected from the group consisting of *Coffea arabica*, *C. canephora* var. *robusta*, *C. canephora* vat. *conulon* and *C. liberica*.

However, Okada ('050) teaches using superheated steam at a temperature from 200 °C to 400 °C for 5 to 15 minutes (*See Abstract and paras. 10-16 and 27.*) for the purpose of removing aromatic scents from arabika coffee (*See paras. 14 and 32.*).

Regarding the rate and amount of steam addition, it would have been obvious to one having ordinary skill in the to adjust the amount of super heated steam for the intended application since it has been held that discovering an optimum value of a result

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effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding the recovery rate, it is noted that the lower claimed limit is slightly above zero. Therefore, it would have been obvious to a person having ordinary skill in the art that the recovery as taught by Mahlmann ('901) and Okada ('050) would be at least this minimal amount as the same coffee and extraction process is used.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use steam at the above temperature and time as taught by Okada ('050) and the above proportional amount in Mahlmann ('901) in order to recover/remove the above aromatic materials.

5. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahlmann et al. (US 3,421,901) in view of Okada et al. (JP 2003-144050) and Takano et al. (US 5,417,993).

Mahlmann ('901) and Okada ('050) teach the method discussed above, however, fail to expressly disclose wherein the coffee beans are obtained by roasting raw coffee beans using at least one type of method selected from the group consisting of far infrared roasting, hot air roasting, direct flame roasting and charcoal roasting and wherein the L value of the roasted coffee beans is 15 to 33.

However, Takano ('993) teaches roasting coffee beans either using an electric sample roaster or by using gas-grill type until the desired L-value is achieved (*See col. 5, l. 25.*) with the L-value being within the range of 15 to 30 (*See col. 5, l. 31.*) for the purpose for the purpose of providing a coffee with improved and enriched aroma (*See*

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Abstract.). Furthermore, the above roasting methods are interpreted as substitutes and all capable of producing the same products.

Therefore, it would have been obvious to use to the above roasting method to provide coffee beans with the above L-value as taught by Takano ('993) in Mahlmann ('901) in order to provide a coffee with improved and enriched aroma.

6. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahlmann et al. (US 3,421,901) in view of Okada et al. (JP 2003144050) and Kazuyuki et al. (JP 2003-033137).

Mahlmann ('901) and Okada ('050) teach the method discussed above, however, fail to expressly disclose wherein the tasty material includes of tea leaves following tea manufacturing wherein the tea leaves are at least one type selected from the group consisting of green tea, oolong tea, black tea, barley tea, adlay tea, jasmine tea, Pu-Erh tea, rooibos tea and herb tea.

However, Kazuyuki ('137) teaches extracting volatile components by steam distillation and obtaining components after steaming (*See Abstract and paras. 30, 35 and 37.*), with the volatile components extracted being from tea, green tea, or oolong tea and arabica coffee (*See Abstract and paras. 30 and 37.*), with the L value of the roasted coffee beans being 15 to 33 (*See paras 30-31 and 35.*) for the purpose of providing a tea drink with a good tea balance (*See para. 6.*).

Therefore, it would have been obvious to extract volatile components from the above teas as taught by Kazuyuki ('137) with Mahlmann's ('901) modified process in order to provide a tea drink with a good tea balance.

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7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mahlmann et al. (US 3,421,901) in view of Okada et al. (JP 2003-144050) and Kino et al. (US 6,231,907).

Mahlmann ('901) and Okada ('050) teach the method discussed above, however, fail to expressly disclose steam uses contains deoxygenated water.

However, Kino ('907) teaches using deoxygenated water coffee processing (*See col. 5, ll. 5-33.*) for the purpose of providing high quality coffee (*See col. 5, ll. 34-45.*) Furthermore, it is known in the art that prior to generating steam, the air, which includes oxygen is typically removed from the water for the purpose of minimizing the corrosive action and mechanical stress that non-condensable air can have on boiler/steam equipment. Furthermore, it was known that the non-condensable oxygen in the steam leads to lower condensation/distillation efficiency since it presents a barrier to condensation and does not provide the vacuum as is the case with condensable steam and aromas.

Therefore, it would have been obvious to a person having ordinary skill in the art to use deoxygenated water as taught by Kino ('907) and known in the art in Mahlmann ('901) in order to provide a high quality coffee by an effective and efficient process without prematurely degrading the processing equipment.

ANSWERS TO APPLICANT'S ARGUMENTS

8. In response to Applicant's arguments (*See pp. 8-10 of Applicant's Paper filed 4/28/2009.*) regarding the previously set forth 35 USC 102 rejections, it is noted that all

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35 USC 102 rejections have been withdrawn, thus, all arguments regarding such are moot.

9. In response to Applicant's arguments (*See pp. 8-10 of Applicant's Paper filed 4/28/2009.*) regarding Takano ('993) and Kazuyuki ('137) as primary references, it is noted that said references are no longer cited as primary references, thus, all arguments regarding such are moot.

10. In response to Applicant's arguments (*See pp. 8-10 of Applicant's Paper filed 4/28/2009.*) regarding Maki ('607) and Morrison ('453), it is noted that said references are no longer cited, thus, all arguments regarding such are moot.

11. In response to Applicant's arguments (*See pp. 8-10 of Applicant's Paper filed 4/28/2009.*) regarding the new limitations for claim 1, it is noted that these new limitations are taught by the newly cited reference as discussed above.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571)272-0496. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTO/
Brent T. O'Hern
Examiner
Art Unit 1794
June 2, 2009

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794